

Memorandum for Record

Date: 24 July 2019

Subject: Seneca PFAS ESI – Summary of 15 June 2019 Sampling Results and Proposed

This memorandum serves as a record of the teleconference, held at 1300 EDT on 15 July 2019, to review the PFAS analytical results from the Seneca Army Depot former Fire House, SEAD-25, and SEAD-26 Expanded Site Investigation (ESI), discuss the path forward for the ESI, and gain concurrence on proposed monitoring well and surface water sample locations.

Attendees: Bob Morse (EPA), Sharissa Singh (EPA), John Swartwout (NYSDEC), Melissa Sweet (NYSDEC), Mark Sergott (NYDOH), Randy Battaglia (CENAN), Derek Pommerenck (CEHNC MMD C Point of Contract/COR), Barry Hodges (CEHNC EPUB), Mike D'Auben (CEHNC), Beth Badik (Parsons), John Santacroce (Parsons), Todd Belanger (Parsons).

A summary of the important decisions and discussions are presented below. Key decisions are noted with a “**path forward**” header.

1. Objectives of the Teleconference

- Summary of the PFAS analytical results for each of the three AOCs.
- Presentation of proposed additional monitoring well locations and surface water samples.
- Regulatory concurrence on the path forward.

2. Fire House Data Summary

- Beth Badik (Parsons) provided a summary of the data and figures provided to the team. It was noted that the data were unvalidated. Validated data were received the day of the call and would be provided shortly after the teleconference.
- Elevated concentrations of PFOA and PFOS found at MWFH-02 indicate likely source near the former Fire House.
- One well, MWFH-03, dry and could not be sampled properly.
- The Army proposed the installation of an additional well, MWFH-04, to the northwest of the former fire house so that the groundwater flow direction could be determined.
 - Randy Battaglia (Army) stated that the entrance to the Fire House was on the east side but that he did not have the operational or usage history of the Fire House. NYSDEC questioned why we were putting the well to the northwest when the Fire House entrance was on the east side. Parsons stated that we were concerned that another well on the east side may end up dry and that it would be best to determine the groundwater flow direction before adding additional wells.
 - Melissa Sweet (NYSDEC) and Sharissa Singh (EPA) agreed with the location of proposed well MWFH-04 to determine groundwater flow direction, but also expressed an interest in more wells on the east side of the Fire House and near MWFH-01 or where equipment was previously stored.
- Representatives of EPA and NYSDEC/DOH requested additional wells near the fire house to characterize the extent of the impacts in this area.
- Ms. Singh stated for the record her concern that the upper aquifer beyond 15ft has not been fully characterized and that this was a data gap that should be addressed in the Remedial Investigation (RI).
- **Path Forward:**
 - Based on the discussion above, the Army will review the proposed well location (MWFH-04), consider the timing of any additional wells, and send updated figures to the project team.

3. SEAD-25 Data Summary

- Ms. Badik described the location of existing wells (prior to the ESI) were noted on the figure. These wells were sampled for PFAS during a Site Inspection (SI) in 2017. The concentrations measured in the ESI wells tend to bound contamination to the north and east of the site with a PFAS plume evident towards the southwest in the direction of local groundwater flow.
- Ms. Singh disagreed that the contamination was bound to the east since the wells were only sampled once. She stated that EPA would like additional sampling to be conducted on the wells east of SEAD-25. Multiple rounds of sampling would confirm if contamination was bounded to the east. Additionally, since there may be a radial component to the local groundwater flow, EPA requests more wells to the north and east. If the proposed MCL (10 ppt) is promulgated in New York, the ESI concentrations in this area (MW25-24) would be hovering around this regulatory limit.
 - Ms. Badik stated that this was a good recommendation and that additional sampling would be appropriate for the RI. Mr. Battaglia agreed and stated that this investigation was not a full RI and was designed to delineate where PFAS contamination was present and if it would impact where people might be exposed to drinking groundwater.
- Mr. Battaglia asked if EPA would like to move proposed well MW25-29 or any of the other proposed wells to address Ms. Singh's concerns about coverage.
- Ms. Singh replied that EPA would like to move MW25-29 to the location of the 'chem box' for MW25-21 [Note: this location would be at the intersection approximately due west of MW25-21 and north of SW25-03] and add a well (MW25-30) to the approximate location of the "See Inset" box [Note: this location is west of MW25-20 and north of MW25-21]. EPA would also like additional sampling taken in the eastern portion of the site.
- Mark Sergott (NYSDOH) mentioned adding more wells further to the west of SEAD-25. EPA and NYSDEC disagreed and preferred wells closer to the site to define the local plume and where it is moving prior to expanding the investigation further from the site. Mark agreed but noted the data gap to the west of MW25-21. [Note: the move of well MW25-29 would address this data gap]
- Ms. Singh asked if any residences in the area used the groundwater. Ms. Badik and Mr. Battaglia explained that there was a groundwater restriction at the site, the upper aquifer is a low-yield formation which does not provide an adequate drinking water supply, and that the local housing units are attached to a municipal water supply.
- Ms. Sweet inquired if the ESI wells were surveyed. Ms. Badik replied that they had not been surveyed but we were hopeful this would be included in future scope.
- Barry Hodges (Army) asked if the SEAD-16/17 wells had been considered for sampling. Ms. Sweet stated that those wells were pretty far away from the sources. Ms. Badik agreed, but stated we could report the groundwater flow direction in these areas as the wells are part of long-term monitoring for metals contamination.
- Mr. Swartwout inquired about surface water in the local ditches that could transport contamination to the southwest. The team discussed the locations of the proposed surface water samples and NYSDEC agreed with the proposed locations.
- **Path Forward:**
 - The Army will review the following proposals:
 - Move the proposed location of MW25-29 to area west of MW25-21 and north of SW25-03.
 - Add an additional well to the west of MW25-20 and north of MW25-21.
 - Provide groundwater flow directions at SEAD-16 and SEAD-17.

4. SEAD 26 Data Summary

- Ms. Badik noted that this figure was oriented so that north was to the left side of the PDF and the direction of groundwater flow was to the west (down on the PDF). Temporary wells (labeled TMW) were installed and sampled for PFAS during the 2017 SI. Permanent wells were installed during the ESI. Proposed additional wells MW26-18 and MW26-19 are located downgradient to evaluate impacts from the high concentrations at TMW26-6 and TMW26-7. Additional well MW26-20 is proposed approximately 900ft downgradient of MW26-16. Based on the

results of the three additional wells, a fourth well will be installed to further delineate the contamination downgradient of SEAD-26.

- Ms. Badik stated that the railroad tracks west of the TWM-5 to TWM-8 line of wells is approximately 15 ft lower in elevation than the wells. This sloped area (shaded on the figure) would be investigated for water seeps and surface water samples would be collected.
- NYSDEC agreed with the proposed location of MW26-20 and the addition of a fourth well based on the results of the other three locations.
- Ms. Singh noted that EPA would like additional wells added to the south since the concentrations at TMW-26-4 and TMW-26-8 (41 and 11 ng/L, respectively) were high compared to the possible future MCL.
 - Mr. Battaglia stated that the location of MW26-19 could be moved further south. The team agreed to a location near the railroad tracks due west of TMW26-4.
- Mr. Battaglia noted that there was a groundwater restriction on SEAD-25 and SEAD-26. Based on discussions with the future landowner (Earl Martin) a final transfer has not been completed on the land west of the AOCs and that they were aware of the potential contamination and would be willing to consider a land use control (LUC) for the future farmland. The farms west of the site are aware of the limited water in the shallow aquifer and would be interested in tying into the municipal water system.
- Ms. Singh noted that the wells were only sampled once and asked if there would be future sampling. Mr. Battaglia mentioned to the team that funding was approved for a base-wide preliminary assessment (PA) and a RI for the SEAD 25/26 AOCs. The PA and RI have not been scoped yet; however, the RI would likely start next year.
- Ms. Sweet asked about an east-west preferential pathway that is visible on the figure between TMW26-3 and MW26-16. Mr. Battaglia stated that there is a ditch there that drains the wooded area. This wooded area is extremely dense and has no access unless it were cleared.
- Mr. Sergott inquired what the next deliverable would be. Ms. Badik stated that we would submit updated figures and a corresponding letter. Details of the work would comply with the existing work plan and QAPP.
- ***Path Forward:***
 - Four additional wells are proposed in the noted locations. Ground reconnaissance in the shaded area (east of the railroad tracks) will look for water seeps. Surface water samples would be collected.
 - Parsons to move proposed location of MW26-19 to railroad tracks due west of TWM26-4.
 - Provide updated figures and letter referencing the existing work plan and QAPP.
 - Ms. Sweet reminded Parsons that NYSDEC will want the data for their EQUIS database. Parsons would submit the data in a timely manner.

The call concluded at 1450 hours.